

REMARKS

The claims in the application are 1-19 and Claims 20-25 added by the present Amendment.

Favorable reconsideration of the application as amended is respectfully requested.

The amendment to independent Claim 1 herein finds support throughout the present application, e.g., in the procedures and examples found on pages 7-11 of the specification. Claims 5 and 6 have been amended to correct an informality, with Claims 20-25 also finding clear support throughout the present application. More particularly, Claim 20 finds support at the top of page 9 of the specification with Claims 21 and 22 finding support at the middle of page 5 and in the drawing, and Claims 23 and 24 finding support, e.g., in the drawing, examples and at the middle of page 4 of the specification. Claim 25 finds support throughout the present application, e.g., at the top of page 4, lines 18-25 on page 5, and at the bottom of page 6 of the specification.

Accordingly, the only outstanding issue is the art rejection of the claims. Claims 1-19 have been rejected under 35 U.S.C. §103 as obvious over U.S. Patent No. 5,981,409 to Takagi et al in view of U.S. Patent No. 4,816,124 to Manabe et al in paragraph 3 of the Office Action. However, it is emphatically asserted the claimed invention herein is clearly patentable over this combination of art for the following reasons.

The present invention is directed to an electrically conductive fabric suitable for use as an electromagnetic wave shielding material, a grounding material or the like. The claimed conductive fabric must possess conductivity not only in the horizontal direction but also in the vertical direction. Furthermore, the conductive fabric must possess good flexibility, in addition to good resin leak prevention, yarn fray prevention and electromagnetic shielding. The advantageous properties possessed by the claimed fabric have been documented, e.g., in the comparative testing presented in Tables 1 and 2 on pages 14 and 15 of the present application. To attain these objectives, it has been found necessary to also metallize inner portions of the fabric as uniformly as possible, besides metallizing just the outer fabric surface. In particular, the intersecting points of the warp and weft are metallized (Claim 20).

The features of the presently claimed invention together with the accompanying advantages attained thereby are neither taught nor suggested by the combination of applied references, for the following reasons.

Manabe et al disclose a process for preparing a metal-coated fibrous object comprising applying a base coating 2 consisting of synthetic resin, e.g., urethane, onto a fibrous base material 1 (column 2, lines 43-50). The metal 3 is then deposited upon the synthetic base coating 2 (Fig. 1 and column 2, lines 54-65). In an alternative embodiment, a synthetic topcoat 4 may be further applied to the metallic layer 3 as shown in Fig. 2 (column lines 38-57). Thus, according to Manabe et al, the urethane

layer 2 is always present between the base material 1 and metallic coating 3, with conductivity being restricted to the horizontal direction only; there can be no conductivity in the vertical direction of the structure taught in Manabe et al. Even if a different kind of fabric as taught, e.g., in Takagi et al, replaces the base material 1 in Manabe et al., then there still would be no conductivity in the vertical direction, contrary to the claimed invention.

Accordingly, Manabe et al teach a structure remote to the present invention, failing to provide the advantages attained herein, and adding nothing to the teachings of Takagi et al which would at all render obvious the claimed invention. Furthermore, Takagi et al are also remote to the claimed invention, for the following reasons.

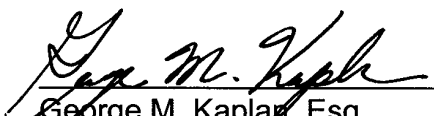
Firstly, as acknowledged in the Office Action, Takagi et al fail to teach or suggest coating of their fabric with metal. Furthermore, the structure of the fabric taught in Takagi et al is quite different from the claimed fabric, contrary to the assertions in the Office Action. More particularly, Takagi et al fail to teach the claimed ranges of fabric surface occupancies of warp and weft. Referring to Fig. 1 of Takagi et al., it is recited at column 3, lines 5-12 and in Claim 1 of this reference that a percent overlap of width $L2+L3$ of overlapped portions of adjacent warps relative to the width $L1$ of an overlapped portion of adjacent warp in a section of the fabric, $L2+L3/L1 \times 100$, is in the range of 35% to 60%, with the weft being located inside in the thickness direction of the fabric. Thus, as clearly shown in Fig. 1, the fabric of Takagi et al possesses a three-layer warp-weft-warp structure.

The fabric of Takagi et al exhibits high dust filtrating efficiency and is superior in both waterproofing and abrasion resistance. However, this fabric cannot be uniformly metallized on both outer and inner surfaces because the three-layer density of this fabric is greater than the fabric defined in Claim 1 and the dependent claims therefrom in the present invention. Accordingly, even if Takagi et al and Manabe et al could be logically combined, such a combined teaching still fails to suggest anything remotely resembling preparation of the claimed invention with the accompanying advantages.

Accordingly, in view of the forgoing amendment and accompanying remarks, it is respectfully submitted all claims presented herein are in condition for allowance. Please contact the undersigned attorney should there be any questions. The additional fee for the new claims added herein is enclosed.

Early favorable action is earnestly solicited.

Respectfully submitted,


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